

WHAT IS CLAIMED IS:

1 1. A system for repositioning teeth from an initial tooth arrangement to a
2 final tooth arrangement, said system comprising a plurality of dental incremental position
3 adjustment appliances including:

4 a first appliance having a geometry selected to reposition the teeth from the
5 initial tooth arrangement to a first intermediate arrangement;

6 one or more intermediate appliances having geometries selected to
7 progressively reposition the teeth from the first intermediate arrangement to successive
8 intermediate arrangements including a last intermediate arrangement; and

9 a final appliance having a geometry selected to progressively reposition the
10 teeth from the last intermediate arrangement to the final tooth arrangement,

11 wherein the appliances comprise polymeric shells having cavities, wherein the
12 cavities of successive shells have different geometries shaped to receive and resiliently
13 reposition teeth from one arrangement to a successive arrangement and wherein at least one
14 appliance includes one or more receptacles each adapted to receive an attachment device.

1 2. A system as in claim 1, wherein each receptacle is shaped to
2 correspond to the shape of the attachment device wherein the attachment device is preformed.

1 3. A system as in claim 2, wherein at least one receptacle is shaped to
2 correspond to the shape of the preformed attachment device having a shape of a bump, bead,
3 wedge, hook, clasp, button, snap, spring, lever, rod, tube, coil, or protrusion.

1 4. A system as in claim 2, wherein at least one receptacle is shaped to
2 correspond to the shape of the preformed attachment device having a shape of an orthodontic
3 bracket or band.

1 5. A system as in claim 2, wherein the preformed attachment device has a
2 surface adapted for attachment to a surface of a tooth and the receptacle is shaped to hold the
3 attachment device facing the surface outward from the receptacle.

1 6. A system as in claim 5, wherein the surface carries an adhesive and the
2 receptacle is shaped to hold the attachment device facing the surface with adhesive outward
3 from the receptacle.

- 1 7. A system as in claim 1, further comprising a preformed attachment
2 device.
- 1 8. A system as in claim 7, wherein the preformed attachment device
2 comprises a bump, bead, wedge, hook, clasp, button, snap, spring, lever, rod, tube, coil, or
3 protrusion.
- 1 9. A system as in claim 7, wherein the preformed attachment device
2 comprises an orthodontic bracket or band.
- 1 10. A system as in claim 1, wherein each receptacle is shaped to
2 correspond to the shape of the attachment device wherein the attachment device is formed
3 from a polymerizable material.
- 1 11. A system as in claim 10, wherein the polymerizable material is
2 positioned on a dental feature with the use of a template to form the attachment device on the
3 dental feature.
- 1 12. A system as in claim 11, wherein the polymerizable material is
2 positioned on one or more dental features with the use of a multi-tooth template.
- 1 13. A system as in claim 11, wherein the polymerizable material is
2 positioned over one dental feature with the use of a single-tooth template.
- 1 14. A system as in claim 10, wherein the polymerizable material is bonded
2 to a dental feature by polymerization.
- 1 15. A system as in claim 1, wherein at least some of the appliances include
2 an indicia designating an order in which at least some of the appliances are to be worn by a
3 patient to provide dental treatment.
- 1 16. A system as in claim 1, wherein at least one of the appliances is
2 enclosed in a package.
- 1 17. A system as in claim 16, wherein a plurality of the appliances are
2 enclosed in a package to be worn in succession by a patient to provide dental treatment.

3